FILE 'HOME' ENTERED AT 14:11:21 ON 15 MAR 2003

=> file reg

COST IN U.S. DOLLARS

1 %

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

0.21 0.21

FILE 'REGISTRY' ENTERED AT 14:11:33 ON 15 MAR 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 MAR 2003 HIGHEST RN 499099-49-9 DICTIONARY FILE UPDATES: 13 MAR 2003 HIGHEST RN 499099-49-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s ginsenoside Rh1

130 GINSENOSIDE

155 RH1

L1 2 GINSENOSIDE RH1

(GINSENOSIDE (W) RH1)

=> d l1 1-2

L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS

RN 80952-71-2 REGISTRY

CN .beta.-D-Glucopyranoside, (3.beta.,6.alpha.,12.beta.,20R)-3,12,20-trihydroxydammar-24-en-6-yl (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Dammarane, .beta.-D-glucopyranoside deriv.

OTHER NAMES:

CN (20R)-Ginsenoside Rh1

CN 20(R)-Ginsenoside Rh1

FS STEREOSEARCH

MF C36 H62 O9

LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, DDFU, DRUGU, IPA, TOXCENTER (*File contains numerically searchable property data)

Absolute stereochemistry.

31 REFERENCES IN FILE CA (1962 TO DATE)
31 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L1 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS

RN 63223-86-9 REGISTRY

CN .beta.-D-Glucopyranoside, (3.beta.,6.alpha.,12.beta.)-3,12,20-trihydroxydammar-24-en-6-yl (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Dammarane, .beta.-D-glucopyranoside deriv.

OTHER NAMES:

CN 20(S)-Ginsenoside Rh1

CN Ginsenoside Rh1

CN Prosapogenin A2

CN Sanchinoside B2

CN Sanchinoside Rh1

FS STEREOSEARCH

MF C36 H62 O9

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, NAPRALERT, TOXCENTER, USPATFULL (*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).

149 REFERENCES IN FILE CA (1962 TO DATE) 149 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s Ginsenoside Rh2

130 GINSENOSIDE

57 RH2

L2 2. GINSENOSIDE RH2

(GINSENOSIDE (W) RH2)

=> d 12 1-2

L2 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS

RN 112246-15-8 REGISTRY

CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.,20R)-12,20-dihydroxydammar-24-en-3-yl (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Dammarane, .beta.-D-glucopyranoside deriv.

OTHER NAMES:

CN 20(R)-Ginsenoside Rh2

FS STEREOSEARCH

MF C36 H62 O8

SR CA

LC STN Files: BEILSTEIN*, CA, CAPLUS, IPA, TOXCENTER (*File contains numerically searchable property data)

Absolute stereochemistry.

17 REFERENCES IN FILE CA (1962 TO DATE)
17 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L2 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS

RN 78214-33-2 REGISTRY

CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.)-12,20-dihydroxydammar-24-en-3-yl (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Dammarane, .beta.-D-glucopyranoside deriv.

OTHER NAMES:

CN 20(S)-Ginsenoside Rh2

CN 3-0-.beta.-D-Glucopyranosyl-20(S)-protopanaxadiol

CN Ginsenoside Rh2

FS STEREOSEARCH

DR 67400-18-4

MF C36 H62 O8

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CSCHEM, DDFU, DRUGU, IPA, MEDLINE, NAPRALERT, TOXCENTER, USPATFULL (*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).

129 REFERENCES IN FILE CA (1962 TO DATE) 129 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s Ginesenoside Rh3

0 GINESENOSIDE

28 RH3

L4 0 GINESENOSIDE RH3

(GINESENOSIDE (W) RH3)

=> S ginsenoside Rh3

130 GINSENOSIDE

28 RH3

L5 2 GINSENOSIDE RH3

(GINSENOSIDE (W) RH3)

=> d 15 1-2

L5 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS

RN 166040-90-0 REGISTRY

CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.,20E)-12-hydroxydammara-20(22),24-dien-3-yl (9CI) (CA INDEX NAME)

OTHER NAMES:

CN (20E)-Ginsenoside Rh3

FS STEREOSEARCH

MF C36 H60 O7

SR CA

LC STN Files: CA, CAPLUS

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L5 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS

RN 105558-26-7 REGISTRY

CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.,20Z)-12-hydroxydammara-20(22),24-dien-3-yl (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Dammarane, .beta.-D-glucopyranoside deriv.

OTHER NAMES:

CN Ginsenoside Rh3

MF C36 H60 O7

SR CA

LC STN Files: AGRICOLA, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAPLUS, MEDLINE, NAPRALERT, TOXCENTER

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11 REFERENCES IN FILE CA (1962 TO DATE)

11 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s Ginsenoside Rh4

130 GINSENOSIDE

31 RH4

L6 2 GINSENOSIDE RH4

(GINSENOSIDE (W) RH4)

=> d 16 1-2

L6 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS

RN 342632-88-6 REGISTRY

CN .beta.-D-Glucopyranoside, (3.beta.,6.alpha.,12.beta.,20Z)-3,12-dihydroxydammara-20(22),24-dien-6-yl (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 20(22) Z-Ginsenoside Rh4

FS STEREOSEARCH

MF C36 H60 O8

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry. Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L6 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS

RN 174721-08-5 REGISTRY

CN .beta.-D-Glucopyranoside, (3.beta.,6.alpha.,12.beta.,20E)-3,12-dihydroxydammara-20(22),24-dien-6-yl (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Ginsenoside Rh4

FS STEREOSEARCH

MF C36 H60 O8

SR CA

LC STN Files: ANABSTR, CA, CAPLUS, TOXCENTER

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

PAGE 1-A

PAGE 2-A

ОН

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 7 REFERENCES IN FILE CA (1962 TO DATE)
- 7 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d his

L1

(FILE 'HOME' ENTERED AT 14:11:21 ON 15 MAR 2003)

FILE 'REGISTRY' ENTERED AT 14:11:33 ON 15 MAR 2003

- 2 S GINSENOSIDE RH1
- L2 2 S GINSENOSIDE RH2
- L3 0 S G-RH3
- L4 0 S GINESENOSIDE RH3
- L5 2 S GINSENOSIDE RH3
- L6 2 S GINSENOSIDE RH4

=> s PAM 110

340 PAM

9227 110

L7 1 PAM 110

(PAM(W)110)

=> d 17

L7 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 174688-80-3 REGISTRY

CN Dammara-20(22),24-diene-3,6,12-triol, (3.beta.,6.alpha.,12.beta.,20E)-(9CI) (CA INDEX NAME)

OTHER NAMES:

CN PAM 110

CN Quasiprotopanaxatriol

FS STEREOSEARCH

MF C30 H50 O3

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1962 TO DATE)

3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s PAM 120

340 PAM

8014 120

L8 1 PAM 120

(PAM(W)120)

=> d 18

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 494753-66-1 REGISTRY

CN Dammara-20,24-diene-3,12-diol, (3.beta.,12.beta.) - (9CI) (CA INDEX NAME)

```
OTHER NAMES:
```

CN PAM 120

FS STEREOSEARCH

MF C30 H50 O2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s PAM 100

340 PAM

41211 100

L9 0 PAM 100

(PAM(W)100)

=> s PBM-110

21 PBM

9227 110

L10 0 PBM-110

(PBM(W)110)

=> s PAN-20

118648 PAN

341223 20

L11 1 PAN-20

(PAN(W)20)

=> d 111

L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 364779-14-6 REGISTRY

CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.)-12-hydroxydammara-20,24-dien-3-yl (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 3.beta.,12.beta.-Dihydroxydammar-20(21),24-diene-3-O-.beta.-D-glucopyranoside

```
CN Ginsenoside Rk2
CN PAN 20
FS STEREOSEARCH
DR 494753-68-3
MF C36 H60 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
```

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1962 TO DATE)

3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

```
=> s PAN-30
118648 PAN
94819 30
L12 2 PAN-30
(PAN(W)30)
```

=> d 112 1-2

L12 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS RN 494753-69-4 REGISTRY

CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.)-12-hydroxydammara-20,24-dien-3-yl 2-0-.beta.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 3.beta.,12.beta.-Dihydroxydammar-20(21),24-diene-3-O-.beta.-D-glucopyranosyl(1.fwdarw.2)-.beta.-D-glucopyranoside

CN Ginsenoside Rk1

CN PAN 30

FS STEREOSEARCH

MF C42 H70 O12

SR C

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry. Rotation (+).

2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L12 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS

RN 114752-85-1 REGISTRY

CN Diacarna PAN 30 (9CI) (CA INDEX NAME)

MF Unspecified

CI MAN

SR CA

LC STN Files: CA, CAPLUS

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

4 REFERENCES IN FILE CA (1962 TO DATE)

4 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 127.52 127.73

FULL ESTIMATED COST

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FILE COVERS 1907 - 15 Mar 2003 VOL 138 ISS 12 FILE LAST UPDATED: 14 Mar 2003 (20030314/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 15

PUBLISHER:

L13 11 L5

=> s 15 and cancer

11 L5

181999 CANCER

L14 2 L5 AND CANCER

=> d l14 ibib hitstr abs

L14 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:59488 CAPLUS

DOCUMENT NUMBER: 137:134208

TITLE: Anticarcinogenic effect of Panax ginseng C.A. Meyer

and identification of active compounds

AUTHOR(S): Yun, Taik-Koo; Lee, Yun-Sil; Lee, You Hui; Kim, Shin

Il; Yun, Hyo Yung

CORPORATE SOURCE: Laboratory of Experimental Pathology, Korea Cancer

Center Hospital, Seoul, 139-706, S. Korea

SOURCE: Journal of Korean Medical Science (2001), 16(Suppl.),

S6-S18

CODEN: JKMSEH; ISSN: 1011-8934 Korean Academy of Medical Science

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English
IT 105558-26-7, Ginsenoside Rh3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(anticarcinogenic effect of Panax ginseng C.A. Meyer and identification

of active compds.)

RN 105558-26-7 CAPLUS

CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.,20Z)-12-hydroxydammara-

20(22),24-dien-3-yl (9CI) (CA INDEX NAME)

The failure to improve the five-year survival rate of ΔR cancer patients, from one in three in the 1960s to one in two in the 1970s, stimulated awareness of the importance of primary prevention of cancer. Korean investigators carried out extensive long-term anticarcinogenicity expts. with 2000 newborn mice to investigate whether Panax ginseng C.A. Mayer inhibited carcinogenesis included by several chem. carcinogens in 1978. There was a 22% decrease (p<0.05) in the incidence of urethane induced lung adenoma by the combined use of red ginseng ext. In the group sacrificed at 56 wk after the treatment with aflatoxin B1, the incidence of hepatoma significantly decreased to 75% by the addn. of red ginseng ext. (p<0.05). The result showed that natural products can provide hope for human cancer prevention. By the newly established "9 wk medium term anticarcinogenicity test model of lung tumors in mice" (Yun's model), we confirmed significant anticarcinogenic effects of powders and exts. of the 6-yr-old dried fresh ginseng, 5- and 6-yr old white ginsengs, and 4-, 5-, and 6-yr old red ginseng. We also demonstrated that the anticarcinogenicity of ginseng was more prominent in aged or heat treated exts. of ginseng and red ginseng made by steaming. To investigate the active components for cancer prevention, several fractions of 6-yr old fresh ginseng and red ginseng, four semi-synthetic ginsenoside Rh1, Rh2, Rg3 and Rg5, major saponin components in red ginseng, were prepd. Among the ginsenosides, Rg3 and Rg5 showed statistically significant redn. of lung tumor incidence and Rh2 had a tendency of decreasing the incidence. Ginsenoside Rg3, Rg5 and Rh2 were found to be active anticarcinogenic compds. Rg3, Rg5 and Rh2 are active components in red ginseng, and they prevent cancer either singularly or synergistically.

REFERENCE COUNT: 89 THERE ARE 89 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 16 L15

=> s 16 and cancer 8 L6

181999 CANCER

8 L6

L16 2 L6 AND CANCER

=> d l16 1-2 ibib hitstr abs

L16 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1996:431012 CAPLUS

DOCUMENT NUMBER:

125:157877

TITLE:

Effects of ginseng saponin on modulation of multidrug

resistance

AUTHOR (S):

Park, Jong-Dae; Kim, Dong-Sun; Kwon, Hyeok-Young; Son,

Sang-Kwon; Lee, You-Hui; Baek, Nam-In; Kim, Shin-Il;

Rhee, Dong-Kwon

CORPORATE SOURCE:

Korea Ginseng & Tobacco Research Institute, Taejon,

305-345, S. Korea

SOURCE:

Archives of Pharmacal Research (1996), 19(3), 213-218

CODEN: APHRDQ; ISSN: 0253-6269

PUBLISHER:

Pharmaceutical Society of Korea

DOCUMENT TYPE:

Journal

LANGUAGE:

English

174721-08-5, Ginsenoside Rh4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effects of ginseng saponins on modulation of multidrug resistance in human cancer cells cytotoxicity to vincristine)

RN 174721-08-5 CAPLUS

.beta.-D-Glucopyranoside, (3.beta.,6.alpha.,12.beta.,20E)-3,12-CN dihydroxydammara-20(22),24-dien-6-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

PAGE 1-A

OH.

AB Multidrug resistance (MDR) has been a major problem in **cancer** chemotherapy. To overcome this problem, the authors prepd. minor ginsenosides stereoselectively from ginseng saponins and searched for a ginseng component which is effective for inhibition of MDR. MDR inhibition activity was detd. by measuring cytotoxicity to MDR cells using multidrug resistant human fibrocarcinoma KB V20C, which is resistant to 20 nM vincristine and expresses high level of mdrl gene. Of several ginseng components, 20(S)-ginsenoside Rg3, a red ginseng saponin, was found to have the most potent inhibitory activity on MDR and it's concn. capable of inhibiting 50% growth was 82 .mu.M.

L16 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1996:171497 CAPLUS

DOCUMENT NUMBER: 124:226602

TITLE: Ginsenoside Rh4, a genuine dammarane glycoside from

Korean red ginseng

AUTHOR(S): Baek, Nam-In; Kim, Dong Seon; Lee, You Hui; Park, Jong

Dae; Lee, Chun Bae; Kim, Shin Il

CORPORATE SOURCE: Korea Ginseng & Tobacco Research Inst., Taejeon,

305-345, S. Korea

SOURCE: Planta Medica (1996), 62(1), 86-7

CODEN: PLMEAA; ISSN: 0032-0943

PUBLISHER: Thieme
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 174721-08-5P, Ginsenoside Rh4

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence);

PREP (Preparation)

(from Korean red ginseng)

RN 174721-08-5 CAPLUS

CN .beta.-D-Glucopyranoside, (3.beta.,6.alpha.,12.beta.,20E)-3,12-dihydroxydammara-20(22),24-dien-6-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

PAGE 1-A

PAGE 2-A

\ ОН

AB A genuine glycoside, named ginsenoside Rh4, was isolated from Korean red ginseng (Panax ginseng C. A. Meyer) through repeated column chromatog., and its chem. structure was established to be 6-O-.beta.-D-glucopyranosyldammar-20(22),24-diene-3.beta.,6.alpha.,12.beta.-triol by spectral and chem. methods. The stereochem. of a double bond at C-20(22) of ginsenoside Rh4 was characterized as (E) from a NOESY expt. in the 1H-NMR of the aglycon. Cyclotoxic activities of ginsenoside Rh4 and its aglycon against cancer cell lines were evaluated by use of the SRB method.

=> s 17 L17 3 L7

=> d 17 1-3 ibib hitstr abs YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:Y

^{&#}x27;IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

^{&#}x27;HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

^{&#}x27;ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN

SAM - Index Name, MF, and structure - no RN
FIDE - All substance data, except sequence data

IDE - FIDE, but only 50 names SQIDE - IDE, plus sequence data

SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used

SQD - Protein sequence data, includes RN

SQD3 - Same as SQD, but 3-letter amino acid codes are used

SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties EPROP - Table of experimental properties

PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract

APPS -- Application and Priority Information

BIB -- CA Accession Number, plus Bibliographic Data

CAN -- CA Accession Number

CBIB -- CA Accession Number, plus Bibliographic Data (compressed)

IND -- Index Data

IPC -- International Patent Classification

PATS -- PI, SO

STD -- BIB, IPC, and NCL

IABS --ABS, indented, with text labels

IBIB -- BIB, indented, with text labels

ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)

OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields. HELP FORMATS -- To see detailed descriptions of the predefined formats. ENTER DISPLAY FORMAT (IDE):end

=> s 17

L18 3 L7

```
=> d l18 1-3 ibib hitstr abs
L18 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER:
                       2003:97432 CAPLUS
DOCUMENT NUMBER:
                       138:133977
                       Process for producing novel dammarane sapogenins and
TITLE:
                       their use as anticancer agents
INVENTOR(S):
                       Huang, Dong; Qi, Dong Feng
                       Panagin Pharmaceuticals Inc., Can.
PATENT ASSIGNEE(S):
SOURCE:
                        PCT Int. Appl., 40 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                   KIND DATE
                                        APPLICATION NO. DATE
    _____
                                         -----
    WO 2003010182
                    A1 20030206
                                        WO 2002-CA1173 20020724
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
            CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
            NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                      US 2001-910887
                                                      A 20010724
                                      US 2001-982018 A 20011019
OTHER SOURCE(S):
                       MARPAT 138:133977
    174688-80-3P, PAM 110
    RL: IMF (Industrial manufacture); NPO (Natural product occurrence); PAC
    preparation); THU (Therapeutic use); BIOL (Biological study); OCCU
```

(Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic (Occurrence); PREP (Preparation); USES (Uses)

(process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

174688-80-3 CAPLUS RΝ

CNDammara-20(22),24-diene-3,6,12-triol, (3.beta.,6.alpha.,12.beta.,20E)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The present invention relates to a group of novel dammarane sapogenins, AB such as I [R1 = H, glc, glc(1.fwdarw.2)glc; R2 = H, OH; R3 = Me, CH2], their use in anticancer applications, and to a process for their prodn. from ginseng. More particularly, this invention pertains to a novel group of dammarane sapogenins, PAM-120 I (R1, R2 = H; R3 = CH2; dashed bond = double bond), PBM-110 II (R1 = H; R2 = OH) and PBM-100 (III) (the dammarane sapogenin structure is specifically clean of any sugar moieties at any position and hydroxyl at C-20), and PAN-20 I [R1 = .beta.-D-glucopyranosyl; R2 = H; R3 = CH2; dashed bond = double bond] and PAN-30 II [R1 = .beta.-D-glucopyranosyl(1.fwdarw.2) .beta.-Dglucopyranosyl; R2 = H] (the dammarane sapogenin structure has sugar moieties but is free of hydroxyl at C-20), obtained by chem. cleavage of dammarane saponins. A novel application of I-III for anti-cancer treatment by using them sep. or together, and/or jointly with other drugs, particularly against multi-drug resistant cancers.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:431012 CAPLUS

DOCUMENT NUMBER: 125:157877

TITLE: Effects of ginseng saponin on modulation of multidrug

resistance

AUTHOR(S): Park, Jong-Dae; Kim, Dong-Sun; Kwon, Hyeok-Young; Son,

Sang-Kwon; Lee, You-Hui; Baek, Nam-In; Kim, Shin-Il;

Rhee, Dong-Kwon

CORPORATE SOURCE: Korea Ginseng & Tobacco Research Institute, Taejon,

305-345, S. Korea

SOURCE: Archives of Pharmacal Research (1996), 19(3), 213-218

CODEN: APHRDQ; ISSN: 0253-6269

PUBLISHER: Pharmaceutical Society of Korea

DOCUMENT TYPE: Journal LANGUAGE: English

IT 174688-80-3, Quasiprotopanaxatriol

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effects of ginseng saponins on modulation of multidrug resistance in human cancer cells cytotoxicity to vincristine)

RN 174688-80-3 CAPLUS

CN Dammara-20(22),24-diene-3,6,12-triol, (3.beta.,6.alpha.,12.beta.,20E)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

AB Multidrug resistance (MDR) has been a major problem in cancer chemotherapy. To overcome this problem, the authors prepd. minor ginsenosides stereoselectively from ginseng saponins and searched for a ginseng component which is effective for inhibition of MDR. MDR inhibition activity was detd. by measuring cytotoxicity to MDR cells using multidrug resistant human fibrocarcinoma KB V20C, which is resistant to 20 nM vincristine and expresses high level of mdr1 gene. Of several ginseng components, 20(S)-ginsenoside Rg3, a red ginseng saponin, was found to have the most potent inhibitory activity on MDR and it's concn. capable of inhibiting 50% growth was 82 .mu.M.

L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:171497 CAPLUS

DOCUMENT NUMBER: 124:226602

TITLE: Ginsenoside Rh4, a genuine dammarane glycoside from

Korean red ginseng

AUTHOR(S): Baek, Nam-In; Kim, Dong Seon; Lee, You Hui; Park, Jong

Dae; Lee, Chun Bae; Kim, Shin Il

CORPORATE SOURCE: Korea Ginseng & Tobacco Research Inst., Taejeon,

305-345, S. Korea

SOURCE: Planta Medica (1996), 62(1), 86-7

CODEN: PLMEAA; ISSN: 0032-0943

PUBLISHER: Thieme
DOCUMENT TYPE: Journal
LANGUAGE: English

IT 174688-80-3P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

174688-80-3 CAPLUS RN

Dammara-20(22),24-diene-3,6,12-triol, (3.beta.,6.alpha.,12.beta.,20E)-CN (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

A genuine glycoside, named ginsenoside Rh4, was isolated from Korean red AR ginseng (Panax ginseng C. A. Meyer) through repeated column chromatog., and its chem. structure was established to be 6-0-.beta.-Dglucopyranosyldammar-20(22),24-diene-3.beta.,6.alpha.,12.beta.-triol by spectral and chem. methods. The stereochem. of a double bond at C-20(22) of ginsenoside Rh4 was characterized as (E) from a NOESY expt. in the 1H-NMR of the aglycon. Cyclotoxic activities of ginsenoside Rh4 and its aglycon against cancer cell lines were evaluated by use of the SRB method.

=> s 18

L19

1 L8

=> d l19 ibib hitstr abs

L19 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2003:97432 CAPLUS

DOCUMENT NUMBER:

138:133977

TITLE:

Process for producing novel dammarane sapogenins and

their use as anticancer agents

INVENTOR(S):

Huang, Dong; Qi, Dong Feng

PATENT ASSIGNEE(S):

Panagin Pharmaceuticals Inc., Can.

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				
WO 2003010182	A1	20030206	WO 2002-CA1173	20020724

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2001-910887 A 20010724 US 2001-982018 A 20011019

OTHER SOURCE(S):

MARPAT 138:133977

IT 494753-66-1P, PAM 120

RL: IMF (Industrial manufacture); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

RN 494753-66-1 CAPLUS

CN Dammara-20,24-diene-3,12-diol, (3.beta.,12.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention relates to a group of novel dammarane sapogenins, such as I [R1 = H, glc, glc(1.fwdarw.2)glc; R2 = H, OH; R3 = Me, CH2], their use in anticancer applications, and to a process for their prodn. from ginseng. More particularly, this invention pertains to a novel group of dammarane sapogenins, PAM-120 I (R1, R2 = H; R3 = CH2; dashed bond = double bond), PBM-110 II (R1 = H; R2 = OH) and PBM-100 (III) (the dammarane sapogenin structure is specifically clean of any sugar moieties at any position and hydroxyl at C-20), and PAN-20 I [R1 = .beta.-D-glucopyranosyl; R2 = H; R3 = CH2; dashed bond = double bond] and PAN-30 II [R1 = .beta.-D-glucopyranosyl(1.fwdarw.2) .beta.-D-

```
moieties but is free of hydroxyl at C-20), obtained by chem. cleavage of
     dammarane saponins. A novel application of I-III for anti-cancer
     treatment by using them sep. or together, and/or jointly with other drugs,
    particularly against multi-drug resistant cancers.
                              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                        2
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> s 111
            3 L11
L20
=> d 120 1-3 ibib hitstr abs
L20 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
                     2003:97432 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        138:133977
TITLE:
                        Process for producing novel dammarane sapogenins and
                        their use as anticancer agents
                        Huang, Dong; Qi, Dong Feng
INVENTOR(S):
                        Panagin Pharmaceuticals Inc., Can.
PATENT ASSIGNEE(S):
                        PCT Int. Appl., 40 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
                        English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
     -----
                                         ______
    WO 2003010182
                     A1 20030206
                                        WO 2002-CA1173 20020724
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
            CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
            NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                       US 2001-910887 A 20010724
                                       US 2001-982018 A 20011019
                        MARPAT 138:133977
OTHER SOURCE(S):
    364779-14-6P, PAN 20
    RL: IMF (Industrial manufacture); NPO (Natural product occurrence); PAC
     (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic
    preparation); THU (Therapeutic use); BIOL (Biological study); OCCU
     (Occurrence); PREP (Preparation); USES (Uses)
        (process for producing dammarane sapogenins from ginseng and their use
       as anticancer agents)
RN
    364779-14-6 CAPLUS
```

.beta.-D-Glucopyranoside, (3.beta., 12.beta.) -12-hydroxydammara-20,24-dien-

glucopyranosyl; R2 = H] (the dammarane sapogenin structure has sugar

Absolute stereochemistry. Rotation (+).

3-yl (9CI) (CA INDEX NAME)

CN

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention relates to a group of novel dammarane sapogenins, such as I [R1 = H, glc, glc(1.fwdarw.2)glc; R2 = H, OH; R3 = Me, CH2],their use in anticancer applications, and to a process for their prodn. from ginseng. More particularly, this invention pertains to a novel group of dammarane sapogenins, PAM-120 I (R1, R2 = H; R3 = CH2; dashed bond = double bond), PBM-110 II (R1 = H; R2 = OH) and PBM-100 (III) (the dammarane sapogenin structure is specifically clean of any sugar moieties at any position and hydroxyl at C-20), and PAN-20 I [R1 = .beta.-D-glucopyranosyl; R2 = H; R3 = CH2; dashed bond = double bond] and PAN-30 II [R1 = .beta.-D-glucopyranosyl(1.fwdarw.2) .beta.-Dglucopyranosyl; R2 = H] (the dammarane sapogenin structure has sugar moieties but is free of hydroxyl at C-20), obtained by chem. cleavage of dammarane saponins. A novel application of I-III for anti-cancer treatment by using them sep. or together, and/or jointly with other drugs, particularly against multi-drug resistant cancers.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:689351 CAPLUS

DOCUMENT NUMBER:

138:150225

TITLE:

Three new dammarane glycosides from heat processed

ginseng

AUTHOR (S):

Park, Il Ho; Kim, Na Young; Han, Sang Beom; Kim, Jong

Moon; Kwon, Sung Won; Kim, Hyun Jung; Park, Man Ki;

Park, Jeong Hill

CORPORATE SOURCE:

Research Institute of Pharmaceutical Sciences, College

of Pharmacy, Seoul National University, Seoul,

151-742, S. Korea

SOURCE:

Archives of Pharmacal Research (2002), 25(4), 428-432

CODEN: APHRDQ; ISSN: 0253-6269

PUBLISHER:

Pharmaceutical Society of Korea

DOCUMENT TYPE:

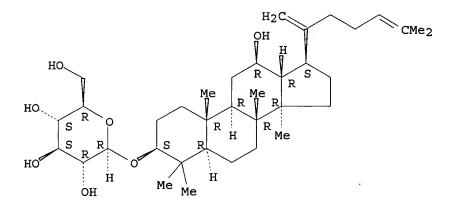
Journal

LANGUAGE:

English

364779-14-6P, 3.beta., 12.beta.-Dihydroxydammar-20(21), 24-diene-3-0-

Absolute stereochemistry. Rotation (+).



Three new dammarane glycosides were isolated from the processed ginseng.
Their structure were detd. to be 3.beta.,12.beta.-dihydroxydammar20(21),24-diene-3-O-.beta.-D-glucopyranosyl(1.fwdarw.2)-.beta.-Dglucopyranoside; 3.beta.,12.beta.-dihydroxydammar-20(21),24-diene-3-O.beta.-D-glucopyranoside, and 3.beta.,6.alpha.,12.beta.-trihydroxydammar20(21),24-diene-6-O-.beta.-D-glucopyranoside based on spectroscopic
evidences. The compds. were named as ginsenoside Rk1, Rk2, and Rk3, resp.
REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:448497 CAPLUS

DOCUMENT NUMBER: 135:294045

TITLE: Liquid chromatographic determination of less polar

ginsenosides in processed ginseng

AUTHOR(S): Kwon, S. W.; Han, S. B.; Park, I. H.; Kim, J. M.;

Park, M. K.; Park, J. H.

CORPORATE SOURCE: College of Pharmacy, Research Institute of

Pharmaceutical Science, Seoul National University,

Seoul, 151-742, S. Korea

SOURCE: Journal of Chromatography, A (2001), 921(2), 335-339

CODEN: JCRAEY; ISSN: 0021-9673

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

IT 364779-14-6

RL: ANT (Analyte); ANST (Analytical study)

(liq. chromatog. detn. of less polar ginsenosides in processed ginseng)

RN 364779-14-6 CAPLUS

CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.)-12-hydroxydammara-20,24-dien-3-yl (9CI) (CA INDEX NAME) Absolute stereochemistry. Rotation (+).

Reversed-phase LC with an evaporative light scattering detector (ELSD) is AΒ used for the detn. of less polar ginsenosides in processed ginseng. These ginsenosides include ginsenosides F4, Rg3, Rg5, Rg6, Rk1, Rk3, Rs3, Rs4, and Rs5. The method used a C18-bonded silica column with a CH3CN/H2O/CH3COOH gradient elution. (20R) and (20S) epimers and geometric isomers at the C-20 position of ginsenosides, which are not generally sepd. by amino columns, were now clearly sepd.

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 112

L21

6 L12

=> d l21 1-6 ibib hitstr abs

L21 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS

10

ACCESSION NUMBER:

2003:97432 CAPLUS

DOCUMENT NUMBER:

138:133977

TITLE:

Process for producing novel dammarane sapogenins and

their use as anticancer agents

INVENTOR(S):

Huang, Dong; Qi, Dong Feng

PATENT ASSIGNEE(S):

Panagin Pharmaceuticals Inc., Can.

SOURCE:

PCT Int. Appl., 40 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.		KI	ND :	DATE			A.	PPLI	CATI	ON N	ο.	DATE			
	-					- -		-	-	 -						
WO 2003	0101	82	A	1	2003	0206		W	20	02-C	A117	3	2002	0724		
W:	ΑE,	AG,	ΆL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	OM,	PH,
	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SÏ,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
	UA,	UG,	US,	UZ,	VN,	ΥU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,
	ТJ,															

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2001-910887 A 20010724 US 2001-982018 A 20011019

OTHER SOURCE(S): MARPAT 138:133977

IT **494753-69-4P**, PAN 30

RL: IMF (Industrial manufacture); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(process for producing dammarane sapogenins from ginseng and their use as anticancer agents)

RN 494753-69-4 CAPLUS

CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.)-12-hydroxydammara-20,24-dien-3-yl 2-O-.beta.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

GI

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- The present invention relates to a group of novel dammarane sapogenins, such as I [R1 = H, glc, glc(1.fwdarw.2)glc; R2 = H, OH; R3 = Me, CH2], their use in anticancer applications, and to a process for their prodn. from ginseng. More particularly, this invention pertains to a novel group of dammarane sapogenins, PAM-120 I (R1, R2 = H; R3 = CH2; dashed bond = double bond), PBM-110 II (R1 = H; R2 = OH) and PBM-100 (III) (the dammarane sapogenin structure is specifically clean of any sugar moieties

at any position and hydroxyl at C-20), and PAN-20 I [R1 = .beta.-D-glucopyranosyl; R2 = H; R3 = CH2; dashed bond = double bond] and PAN-30 II [R1 = .beta.-D-glucopyranosyl(1.fwdarw.2) .beta.-D-glucopyranosyl; R2 = H] (the dammarane sapogenin structure has sugar moieties but is free of hydroxyl at C-20), obtained by chem. cleavage of dammarane saponins. A novel application of I-III for anti-cancer treatment by using them sep. or together, and/or jointly with other drugs, particularly against multi-drug resistant cancers.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:689351 CAPLUS

2

ACCESSION NUMBER: DOCUMENT NUMBER:

138:150225

TITLE:

Three new dammarane glycosides from heat processed

ginseng

AUTHOR (S):

Park, Il Ho; Kim, Na Young; Han, Sang Beom; Kim, Jong Moon; Kwon, Sung Won; Kim, Hyun Jung; Park, Man Ki;

Park, Jeong Hill

CORPORATE SOURCE:

Research Institute of Pharmaceutical Sciences, College

of Pharmacy, Seoul National University, Seoul,

151-742, S. Korea

SOURCE:

Archives of Pharmacal Research (2002), 25(4), 428-432

CODEN: APHRDQ; ISSN: 0253-6269 Pharmaceutical Society of Korea

PUBLISHER:

Tournal

DOCUMENT TYPE:

Journal English

LANGUAGE:

English

IT 494753-69-4P, Ginsenoside Rk1

RL: BSU (Biological study, unclassified); PRP (Properties); PUR

(Purification or recovery); BIOL (Biological study); PREP (Preparation)

(new dammarane glycosides from heat-processed ginseng)

RN 494753-69-4 CAPLUS

CN .beta.-D-Glucopyranoside, (3.beta.,12.beta.)-12-hydroxydammara-20,24-dien-3-yl 2-O-.beta.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Three new dammarane glycosides were isolated from the processed ginseng.

Their structure were detd. to be 3.beta.,12.beta.-dihydroxydammar20(21),24-diene-3-O-.beta.-D-glucopyranosyl(1.fwdarw.2)-.beta.-Dglucopyranoside; 3.beta.,12.beta.-dihydroxydammar-20(21),24-diene-3-O.beta.-D-glucopyranoside, and 3.beta.,6.alpha.,12.beta.-trihydroxydammar20(21),24-diene-6-O-.beta.-D-glucopyranoside based on spectroscopic
evidences. The compds. were named as ginsenoside Rk1, Rk2, and Rk3, resp.

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1990:237003 CAPLUS

DOCUMENT NUMBER: 112:237003

TITLE: Heat- or pressure-sensitive printer ribbons

INVENTOR(S): Takimoto, Hiroshi; Sano, Hideo PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 01055284 A2 19890302 JP 1987-212201 19870826 PRIORITY APPLN. INFO.: JP 1987-212201 19870826 OTHER SOURCE(S): MARPAT 112:237003 114752-85-1, Diacarna PAN 30 RL: USES (Uses) (printer ribbon inks contg., heat- and pressure-sensitive) RN114752-85-1 CAPLUS CN Diacarna PAN 30 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

AN=NZ (N=NZ¹)
$$_{n}$$
N=N NHX

MO₃S

(SO₃H) $_{m}$ I

$$NH_2$$
 NH_2
 NH_2
 NH_2
 NH_2
 NH_2
 NH_3
 NH_2
 NH_3
 NH_2
 NH_3
 NH_2
 NH_3
 NH_4
 NH_5
 NH_5
 NH_5
 NH_6
 NH_7
 NH_7
 NH_7
 NH_7
 NH_7
 NH_8
 NH_8
 NH_9
 NH_9

The title ribbons, providing high-d. images with low printing pin wear, have an ink layer contg. .gtoreq.1 azo dye chosen from I and II (A, Z, Z1 = (un)substituted benzenediyl or naphthalenediyl; X = H, lower alkyl, Ph, SO3M-substituted Ph; M = H, alkali metal, NH4, amine residue; m, n = 0-1] and a wax (softening or m. 40-150.degree.) and/or thermoplastic resin. A hot-melt ink comprised 97% Daiamid Y fatty amide and 3% I [AN:NZ(N:NZ1)n = III; m = 0; M = Na; X = m-C6H4SO3Na].

L21 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1989:499146 CAPLUS

DOCUMENT NUMBER: 111:99146

TITLE: Transfer recording sheets with an ink layer containing

azo type dye and wax and/or thermoplastic resin

INVENTOR(S): Takimoto, Hiroshi; Sano, Hideo

PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01055285	A2	19890302	JP 1987-212202	19870826

PRIORITY APPLN. INFO.: JP 1987-212202 19870826

114752-85-1, Diacarna PAN 30

RL: USES (Uses)

(transfer recording sheet contq., for images with good transparency and lightfastness)

114752-85-1 CAPLUS RN

CN Diacarna PAN 30 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE *** GΙ

RN=N

$$R^{2}O_{3}S$$
 $SO_{3}R^{2}$
 BuO
 II

AB Transfer recording sheets are prepd. by forming, on a substrate, a color material layer from an ink compn. contg. an azo-type dye of the formula I [R = benzene or naphthalene ring which has SO3R2 on the ortho position to the azo group and may be substituted with other groups; R1 = alkyl, Ph which may be substituted; R2 = H, alkali metal, amine, NH4; Z = CO, CO2, SO2) and a wax having a m.p. or softening point of 40-150.degree. and/or a thermoplastic resin. The sheets, which are adaptable to heat- and pressure-sensitive transfer recording, provide transparent and high color quality images with good lightfastness. Thus, a polyester film was coated with a mixt. of Diamid Y (fatty acid amide) and I (R = II; R1 = Me; R2 = NH4; Z = CO) (97:3 wt. ratio) to give a thermal-transfer film which gave high-quality images on an electrophotog. paper.

L21 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1989:499145 CAPLUS

DOCUMENT NUMBER:

111:99145

TITLE:

Transfer recording sheets with ink layer containing

azo-type dye and wax and/or thermoplastic resin

INVENTOR (S): PATENT ASSIGNEE(S):

Takimoto, Hiroshi; Sano, Hideo Mitsubishi Kasei Corp., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ____ -----JP 01055283 A2 19890302 JP 1987-212199 19870826 PRIORITY APPLN. INFO.: JP 1987-212199 19870826

114752-85-1, Diacarna PAN 30

RL: USES (Uses)

(transfer recording sheet contg., for images with good transparency and lightfastness)

114752-85-1 CAPLUS RN

CN Diacarna PAN 30 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE *** GI

$$R^2$$
 R^3 $N = NZ^1N = NR^1$ R^4O_3S SO_3R^4 I SO_3Na II

Transfer recording sheets are prepd. by forming, on a substrate, a color AB material layer made of an ink compn. contg. an azo-type dye of the formula I [R, R1 = naphthalene ring substituted with OH, NH2, acrylamino, or SO3R4, benzene ring substituted with alkyl, alkoxy, OH, NH2, acylamino, or SO3R4; R2, R3 = OH, NH2; R4 = H, alkali metal, amine, NH2; Z, Z1 = naphthalene ring substituted with SO3R4, benzene ring which may be substituted with alkyl, alkoxy, or acylamino) and a wax having a m.p. or softening point of 40-150.degree. and/or a thermoplastic resin. The sheets, which are adaptable to heat- and pressure-sensitive transfer recording, provide transparent and high color quality images with good lightfastness. Thus, a polyester film was coated with a mixt. of Diamid Y (fatty acid amide) and I (R = R1 = p-C6H4NHCOMe; R2 = OH; R3 = NH2; R4 = P-C6H4NHCOMeNa; Z = Z1 = II) (97:3 wt. ratio) to give a thermal-transfer film which gave high quality images on an electrophotog. paper.

L21 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS 1988:177372 CAPLUS

ACCESSION NUMBER:

DOCUMENT NUMBER: 108:177372

TITLE: Maleic anhydride-olefin copolymer-coated pigment and

its use in electrophotographic liquid developers Tsubushi, Kazuo; Kuramoto, Shinichi; Nagai, Kayoko

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 6 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE . Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62235956	A2	19871016	JP 1986-78813	19860405
JP 07005850	B4	19950125		
DDTODTTV ADDIM THEO			TD 1006 70013	10000405

PRIORITY APPLN. INFO.: JP 1986-78813 19860405

114752-85-1

RL: USES (Uses)

(electrophotog. toner contg. pigment coated with)

ВИ 114752-85-1 CAPLUS

CN Diacarna PAN 30 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

AB A maleic anhydride-olefin copolymer-coated pigment particles and an electrophotog. liq. developer compn. contg. the pigment are claimed wherein the compn. comprises a resin-based toner contg. the above coated pigment dispersed in a low-permittivity insulating carrier liq.

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:H

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